FTS-NASA-VOICE

Moderator: Stephen Ambrose
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1:00 pm CT

Coordinator: Welcome and thank you for standing by.

At this time all participants are in a listen-only mode.

Today's conference is being recorded. If you have any objections, you may disconnect at this time.

Now, I will turn the call over to Mr. John Haynes. Sir, you may begin.

John Haynes: Thank you, (Heather).

Thank you everybody on line and welcome to the ROSES Decision Support through Earth Science Research Results Pre-Solicitation Teleconference.

Before we begin I'd like to go ahead and have everybody who is here at the headquarters introduce themselves. I'm John Haynes, I'm serving as the ROSES Coordinator for the Applied Sciences Program (unintelligible) I'm also Program

Manager for the Aviation Applications Program and the Public Health Applications Program.

(Lucio Cox): (Lucio Cox) here at headquarters, Process (unintelligible) Program Manager and assisting John in this ROSES effort. ***(Lucien Cox is the Program Manager for the Crosscutting Program under NASA Applied Sciences)***

Stephen Ambrose: Steve Ambrose, Program Manager for Disaster Management and Homeland Security.

(Rich Heckman): This is (Rich Heckman), Program Manager for Energy Management. ***(Rich Eckman is the Program Manager for Energy Management)***

Teresa Fryberger: This is Teresa Fryberger, the Director of the Applied Sciences Program here at NASA.

Ed Sheffner: Ed Sheffner, Program Element Manager for Carbon, Agricultural Efficiency and Invasive Species at NASA Headquarters.

((Crosstalk))

(Jim Ellington): (Jim Ellington).

(Julie Prova): (Julie Prova) with NRESS and (Rashida Hogg) is with us also.

John Haynes: And do we have a few more people from headquarters on the line who want to introduce themselves?

Woody Turner: Woody Turner, I'm on line, Program Manager for Ecological Forecasting.

Lawrence Friedl: This is (Lawrence Friedl). Can you hear me?

John Haynes: Yes, we can hear you, Lawrence.

Man: Yes.

Lawrence Friedl: Yeah. (Lawrence Friedl), Program Manager for Air Quality, Coastal Management and Water Management.

Martin Frederick: This is Marty Frederick, I'm Deputy (unintelligible) Director of the Applied Sciences Program.

John Haynes: All right and thank you all and thanks everybody who's joining us from the phone. Hopefully everybody is logged in to the net conferencing Web site and can see the slides presented there in front of you.

To go over some logistics, we'll move to Slide 2 with the agenda first. We've just of course done our introduction and welcome.

We're going to next go to logistics and then the - then we'll have a sort of Applied Sciences Program overview with our Director Teresa Fryberger.

Then it'll turn back over to me and I'll go over some of the salient points of the Decision Support through Earth Science Research Results Solicitation.

We will then do a question and answer period, and the next slide will show how we will do

that. We're allowing online questions and voice questions and we would prefer the online questions at beginning because of how many people we have online. But after hopefully most of those questions are exhausted for those who may not have access to the Internet, we will open up the lines at the end to allow voice questions.

Here are some - Slide 3 entitled Logistics and Info. During the presentation, again, from NASA headquarters, phone participants except for the headquarters program managers online with us, will be in a listen-only mode. The lines will be opened for questions after headquarters' presentation are completed and a selection of Web interface questions are answered.

Please put your phone on mute when not speaking and do not put us on hold as music may play at your location and we would get a concert. Questions will be submitted to the Web interface first and then as voice as time permits.

Our (unintelligible) presentations will not last more than 30 minutes, we don't plan on, and we'll have about an hour and a half for questions afterwards.

Answers to questions will be provided later on the (unintelligible) Web site and also NASA's Applied Sciences Program Web site. And we encourage you to read the solicitation completely and access our Web site for more information.

With Slide 4 gives you everything you'd ever wanted to know about the Applied Sciences program at NASA via Web site. We have a link to the ROSES 07 Solicitation, to the NASA Science Mission Director Web site, to the NASA Earth Science Division Web site, and the Applied Sciences Program Web site.

Now that Web site there for the Applied Sciences Program is the one where there's a lot more information on the solicitation, a lot of reference material that was referenced in the solicitation itself can be found on that Web site. And like I said, these slides that we're showing today plus the transcription of this meeting will also be available there in the very near future.

National Applications Program Element Plans and supporting documents can be found on the AIWG Web site linked there along with our systems engineering capability working documents.

And also, special emphasis on the last link there. That is a link to the National Academies of Earth Science & Applications from Space: National Imperatives for the Next Decade and the Beyond Report, commonly known in the vernacular as the Decadal Survey that was issued by the Academies on January 15. It is free to read online and it is certainly a guiding document for the National Science Division, and Teresa will speak more about that coming up shortly.

And the next slide is intentionally left blank, so we will now - I will now turn it over to Teresa Fryberger who will give an overview of the Applied Sciences Program.

Teresa Fryberger: Okay. Thank you, John.

I am new to NASA; I came just before Christmas of the past year. And - but I have worked in the government around several different agencies and in and with several different other US government agencies.

And NASA seems quite unique to me. Some of those things that make it kind of special are I think NASA's science in general has much more public engagement in a

number of different ways than any other science endeavor I've been in and I think that's because many of our citizens are very interested in the kind of exciting science that we do -- space travel, explorations, and so forth.

So many of our citizens and the public are very interested in NASA research more so than I think any other place I've been. And in particular, NASA's Earth science is, more than that, is critically important really to all of our citizens, and indeed, I would say all the citizens around the world. I think we in Earth science feel that as we face the future with an ever-growing population, a population that we have proven in recent history that can impact the earth system in significant and unexpected ways, we will have many, many challenges to come.

I think also with the ever growing recognition of climate change and other environmental things that we're seeing, the melting of the North Pole and so forth, as we move into the future, we will need more than ever the sophisticated and global observing tools and predictive models that NASA can offer.

So I'm very happy to see part of this. It's also a bit of an awesome responsibility.

If you go to the next slide -- by its very nature, Earth science research cannot be done by any single entity or any single agency such as NASA. So we at headquarters and many of our members of our scientific community work across agencies and different scientific communities to do our work. And much of our research and our research solicitations are guided by the multi-agency plans such as the one shown here.

Shown here is the strategic plan for climate change research across the government, the strategic plan for the US integrated earth observation system, and the ocean

blueprint or the ocean action plan that came out in the last few years.

So we've participated in the development of these plans and we also use them to guide where our programs are going to go.

I would add to this that we should really have the Decadal Survey that John just mentioned. On here, it lays out what the academy and the community thinks as a path forward for earth observation. And much of what we will be doing in the future will be in response to that. So that is very good reading material or at least parts of this.

Just to let you know where NASA Earth science and applied sciences fall in the NASA strategic plan that was developed in 2006, we fall under the NASA Strategic Goal 3: develop a balanced overall program of science and exploration and aeronautics consistent with the redirection of human space flight programs focused on exploration.

Under that, that's an overall one, under that, study earth from space to advance scientific understanding and meet societal needs. And if you go down on the text, which I won't read all, but this speaks to the program we're talking about today that NASA Applied Sciences Program will continue the agency's efforts in benchmarking the assimilation of NASA research results into policy and management decision support that are vital for the nation's environment, economy, safety, and security.

So that's where we fall.

To get back to the Earth science endeavor broadly, we not only do science, we run

missions. We currently have about 14 missions out there observing the earth and have seven missions in the planning stages that will be launched in the next five to ten years, and we are planning to address the Decadal Survey recommendation for many new missions.

So it is not to say that we will have all the new missions in the Decadal Survey but we're certainly going to use that as a guiding document as we move into the future. And if you've seen the Decadal Survey, you'll see that we may be facing some data gaps if we don't get going, probably will even if we do get going, but we have to get going on this.

The research that we do in Earth system in the Earth Science Program, this is an old slide, forget about Earth-Sun system, it's just Earth science at this point, we focus all of our research on really societal benefits, climate variability and change, earth surface and interior weather, carbon cycle, atmospheric composition, water and energy cycles.

Our research wouldn't mean much, I don't think, if we didn't have a very strong modeling component to the program. And this slide simply points out that we - a large modeling component as well as super-computing facilities to do that.

The next diagram gives sort of a framework for how we work in applied science. And I really just want to use it to kind of illustrate the mission of our program, and that is to expand Earth science research results model, data, observations to a broader community than would otherwise get the fruits of our labor.

And by that, I mean much of our research will go to the climate research community and other research communities. In our case, we take it beyond that and try to apply

these results for immediate or soon to be or now societal benefits.

So if you look at the diagram, what this shows is on the left is the research results that we can get out of our NASA research that we're already doing, the outputs of that, predictions, forecasts from the modeling and observations.

And what we do is we partner with a number of other agencies or entities such as regional groups to use that data in their decision-making whether it be policy-making and it says decision support tools here, but I don't want people to think that this is just - this is actually a physical kind of box. It's a fairly loosely-defined thing. It can be a group that makes decisions, it can be, you know, part of the air traffic control system, whatever. And out of that we get better decisions and management.

We focus our efforts in 12 societal benefit areas which encompasses most of what I think we could do, including agriculture efficiency, and there our partners would be the Department of Agriculture obviously, the economic portion of the Agriculture Department, Air Quality, we're looking at EPA and NOAA, Aviation, as (FAA), and so forth. I won't walk through all of these, you can see them yourselves. But all - the partnership aspect is very strong in our program.

I would also say that it's - this program is challenging for us to our managing it and our program managers because not only do we have to develop these partnerships and understand the needs of these partner agencies or groups, but we have to understand the research results that are coming out of it. So we're partnering both with the research community as well as all of these other broad range of groups.

The next diagram kind of outlines the approach that we have taken in the program. It's really a systems engineering approach or process. I don't think that I want folks to look at this as a rigid process by which you have to follow these as if they were steps, but rather a construct that tells you the important components of what you need to do or what we need to do in our projects.

In other words, it isn't like a typical research project, our projects aren't, in the sense that we do have partnerships that must be developed, in the sense that we actually have to verify and validate our outputs into decision support tools. So really what we do is we identify requirements and specifications of our research capability and products, our research products, excuse me.

So I don't want to go into this too much and I don't want folks to think that this is a very rigid set of steps, but rather a construct. And I think that the things that are in here are - really illustrate what needs to be done in an applied sciences project.

With that, I will end. I'm very happy to see that something like 80 people are on the line and there is so much interest in our program. And I'll let John take over again.

John Haynes: Okay. Thank you, Teresa.

We're going to move on now to -- this would be Slide 16 as we begin to discuss the purpose and a little bit of the details of the ROSES Solicitation that Applied Sciences is sponsoring.

Before I do that, I would like to remind the people who are in the net conference to any questions you have that you would like answered at the end of our presentation to please submit them online. We don't have any questions submitted yet, and

we have 90 people. And so I - it will be much easier for us to do questions in that manner rather than by voice with these many people on the phone, so I would encourage that.

Our first slide here, Slide 16, states the purpose directly from the solicitation. This solicitation seeks proposals to integrate NASA Earth science research results in the decision support system serving applications of national priority and to document improvements in the performance of the decision support system.

The overall objective of these projects is to sustain use of geosciences products and NASA Earth science research results by operational organizations in their decision-making activities to benefit the nation and society.

So one question that is often asked is "What are NASA Earth science research results?"

And again, directly from the solicitation, we just want to make clear that our science research results in NASA include Earth science measurements, particularly NASA spacecraft observations, outputs and predictive capability from Earth science model, particularly models that use NASA spacecraft - particularly models that use NASA spacecraft observations -- algorithms, visualizations, new knowledge about the Earth system, and other techniques and geosciences products.

In conducting its research mission, the NASA Earth Science Division utilizes validated commercial remote sensing data products whenever those products can achieve the scientific objectives and are cost effective.

Moving to the next slide, we're going to go through some guidelines to understand --

several of these came from questions that had been asked via email from people over the past several weeks, so we just want to make them clear here. And this information is in solicitation but perhaps was not as clear as it could be. The program support projects have a national impact. We get this question a lot on the scope of our program.

We support projects that have national impact including regional and international activities if they have US national importance. Some cases, the decisions and decision support systems may be inherently regional such as covering multiple states are international in nature. But in such case, the proposal must establish what the national importance of the regional or international decision-making is, because NASA is responsible ultimately to the American taxpayer.

The NASA Applied Sciences Program does not build nor funds the creation or development of decision support tool for operational entities. We support projects that enhance the performance of existing decision support systems and decision making processes to the integration of NASA Earth science products.

For this solicitation, the DSS in a proposal must already be in existence and/or in development, and that's important, by the end-user organization by January 1, 2007.

We want to make it clear that the decision support tool that is the target of these proposals does not have to be mature when it can be one in development by the operational entity that is a partner.

And identifying Earth science research results can improve the decision support system. Proposal teams are encouraged to use NASA Earth science research results for

partially or wholly from commercial remote sensing and geo-spatial information.

Proposals may blend commercial remote sensing and geo-spatial information with NASA Earth science measurements to integrate into and improve the DSS.

Commercial remote sensing data that's been validated by the joint agency commercial imagery evaluation, also known as JC, in support of NASA Earth science research grants should be considered NASA Earth science research results.

Going to Slide 19. Solicitation is for new awards. NASA will not extend proposals for successful proposals to solicited projects, those periods of performance are ending, nor proposals for supplemental funding of existing solicited projects in response to the solicitation.

(Unintelligible) of organizations and collaboration spending organizational sectors including (unintelligible) private, federal, public, non-profit, and expertise, including technical measurement and scientific are strongly encouraged and recommended. We want to make it clear that certainly collaborations with private sector entities are welcome. When federal agencies are part of a proposal team, the program strongly encourages non-federal organizations, be they companies, academic institutions, or non-profit, to also be part of the team.

End-user organizations, that is the organizations that use the decision support tools to support their decision-making responsibilities, must be explicitly identified and involved as active collaborators, participants, and/or leaders in the team.

Going to Slide 20, again, we want to make clear that successful proposals should show a

clear understanding of the user community, familiarity with NASA Earth system science and results, use an array of NASA Earth science research results especially from recently launched missions and our simulated products from future missions, extend NASA science products, the decision support tool, as well conducted teams and partnerships, as well can see management approach for project and partnership. They should be activities that will benefit both partner organizations and NASA. They should have a well-conceived approach to transition project results, in other words, an exit strategy.

Proposals that are downgraded that do not have a clear transition plan are proposed to identify users and extend results after the project is over, (a build and they will come) approach as it's come to be known.

Also it's important to have letters of support that indicate the interest and commitment to use results in the decision-making on a sustained basis after the project. These are letters of support and commitment from the end-user organizations.

After the release of the solicitation, several of our program managers have gotten inquiries asking for clarification points in their specific priority topic sections in the solicitation. So we're going to go over those now just to provide some more information on these areas.

In public health, the program is requesting proposals in the area of oceans and human health. More on this topic can be found in the United States' Ocean Research Priority Plan and Implementation Strategy at the link listed.

In coastal management, Section 5.1.8, on the statement -- Since the program's portfolio currently includes significant efforts focused on the Gulf of Mexico and

harmful algal blooms, the program strongly request projects focusing on other region and topics. This sentence is not meant to exclude proposals that include the Gulf of Mexico as the geographic focus.

In aviation, the program specifically requests proposals in the areas of numerical weather prediction and space weather. Space weather proposals may incorporate NASA heliophysics research results in addition to NASA Earth science research results.

While the rest of the solicitation is completely focused on Earth science research results, the Aviation Program includes space weather as a focus. Therefore, the inclusion of NASA heliophysics results is certainly welcome and encouraged.

In disaster management, the program requests proposals related to the advance and/or active processing system next generation, AWIPS 2 of the National Weather Service. AWIPS is a multi-hazard decision support system providing information related to severe weather, hydrology, climate, wildfire, marine, and air quality information. More information on AWIPS 2 can be found at the link given.

In Homeland Security, more information on the Department of Homeland Security's mission for improved air, water security monitoring can be obtained at that link given, and more information on the food security needs and goals can be obtained at the University of Minnesota's Web site which is also given on this slide.

Here is a chart from the solicitation itself, again, describing the funding, the parameters, estimated budget program, total amount of funding. These are three-year projects from FY08 to FY10, will be the funding.

Estimating about 5 to 12 million dollars per annum. We anticipate 16 to 45 projects will be awarded with an expected range of award between $240,000 and $320,000. Period of performance is up to three years. The expected project start date will be on or before January 1. And contributions from part organizations are strongly encouraged. However, partner funding does not count towards funding level guidelines.

And the schedule we're looking forward to, again, May 25 is the deadline for final proposal to be submitted electronically to the NSPIRES Web site. Only proposals submitted electronically through that Web site by May 25 will be accepted.

In June proposal we sent to reviewers, panels will meet in August to review the proposal. In September, we plan the announcement of awards with proposals being funded in the November to December timeframe.

And that ends our presentation. I'll ask if the program mangers or Teresa have anything or the NSPIRES colleagues have anything to add here?

Would (Rich), Martin, Woody, Lawrence, do you all have anything to add?

Man: No. Good job, John. Thank you.

Man: Thank you, John.

Man: Thanks, John.

Thank you for making the point about the international and regional activities. I have a received a lot of phone calls related to that. And so, thank you for clarifying that. We are interested in those, but that people just have to make the connection back to why it's of interest to the US and the US taxpayers.

(Rich Heckman): And this is (Rich Heckman). Nothing additional for me.

John Haynes: All right. Thank you, (Rich).

I'm going to now turn and start answering questions from online. And we've got quite a few now. So I guess.

Let's see here. Let's see. I'll go in order from when they came in.

So let's - okay. A lady has asked, "Could you give again the Web site that the list of questions asked would be available on?"

It is the Web site only, the second slide, that is the NASA Applied Sciences Program Web site. The Web site begins with science.hq.nasa.gov and goes on from there. That will be the Web site where the transcription of this teleconference plus these slides and lots of other information on ROSES is and will be posted.

The website is: http://science.hq.nasa.gov/earth-sun/applications/sol_current.html

John Haynes: It's a long question. Concerning facilities and equipment. "In the budget justification narrative, the guidelines requests that a description of required facilities and equipment be provided including those existing that are required for the project. Why are the existing facilities included in the budget justification narrative

they're not part of the budget? It appears to be redundant with a separate section entitled "Facilities and Equipment" that also requires a description of the facilities and equipment as part of the overall proposal.

Okay. Lawrence, did you hear that question?

Lawrence Friedl: I did hear it. I haven't - since I can't read it, I…

John Haynes: Yeah, I know. We'll come back, looking at that a little closer. It's a pretty long question, I don't want to give an inaccurate answer.

After telecom answer to the question above:

Appendix A.20 of ROSES-2007 incorporates the 2007 Edition of the Guidebook for Proposers.

This question appears to be referring to the 2006 Edition of the Guidebook. This is a legitimate issue that has been rectified in the 2007 edition. Please refer to Section 2.3.10(a) of the 2007 edition to answer this question. Specifically, the description of any required facilities and equipment has been incorporated into the required budget narrative.

One question. "Can you talk a little bit on the focus of pre-evaluation and evaluation processes?"

Evaluation processes are usually, in a typical project, a first year effort to evaluate the feasibility of the data stream, the model predictive capabilities, and the other architectures that are going to be used to enhance the decision support tool.

At first your effort usually ends up in an end-of-the-year evaluation report stating that -- stating the success of the past year, determining feasibility and the go-forward

as we move to a (V & V) effort in the second year that is an effort to actually verify and validate the - how the data and the model predictive capabilities -- the NASA Earth science research results -- will actually plug into the decision support tool in the go forward. I'm not sure if anybody has any other comments.

Lawrence Friedl: John, can I answer that?

John Haynes: Sure.

Lawrence Friedl: This is Lawrence.

I would say that in many ways, as the proposal itself represents a significant wave towards completing that evaluation phase, because in the evaluation you have to identify the decision support system as well as identify what the opportunities are for Earth science data to support and enhance that decision support system.

So in many ways, that first evaluation part may not take a year for the solicited projects since a lot of that's gone into the proposal itself.

John Haynes: Thank you, Lawrence, for clarifying that.

(Unintelligible) can we get a copy of the presentation?

Yes, they'll be posted on the Applies Sciences Web site. (http://science.hq.nasa.gov/earth-sun/applications/sol_current.html)

We have one question that -- "Can you be a bit clear on the definition of existing decision support tools that are to be enhanced?"

Reading directly from the solicitation, generally -- the first page of solicitation in fact -- generally, decision support systems are interactive, computer-involved systems, and provide organizations with methods to retrieve and summarize information, analyze alternatives, and evaluate scenarios to gain insight on critical factors, sensitivities, and consequences of potential decisions.

Types of decision support systems might include early warning systems, planning tools, forecasts, resource allocation tools.

Again, this is a very broad definition because decision support systems are broad. They can be tools themselves, computer software, but they can also be decision support centers, if you will, where multiple decision support tools come together and inform the decision-makers on ways to go forward with management and policy issues.

For example, one project we have in the Homeland Security realm is to enhance the (IMAAC) Homeland Security Center with NASA Earth science research results.

So again, that's the definition from the solicitation, as Teresa mentioned earlier, it covers a wide range of tools/systems/processes that allow decision-makers to get their job done.

Man: And, John, if I can just add to that.

The intent is not for NASA to tell another organization how to make its decision. We want to work with organizations that have a decision-making process or decision

support systems that already exist. And we want to help them see if the NASA data or the Earth science data or the geo-science data can improve that decision.

And so it's not NASA's place to tell them how to go about making their decisions, but it is an opportunity for us to run their - or have them run their decision-making process both with and without the Earth science data to see if there's a marginal benefit to using Earth observations, models, other algorithms, et cetera.

John Haynes: We have another question that asks for specific examples of existing decision support systems that have already been identified.

As far as specific examples of projects that NASA is already working on to enhance decision support tools, those can be found on our Web site, both on the Applied Sciences Web site at the science.hq.nasa.gov portal, as well as on the AIWG Web site, that Web site was given on that slide here at the beginning of the presentation as well.

The AIWG web site: http://aiwg.gsfc.nasa.gov/

On that Web site, there's actually a lot of useful information including booklets detailing decision support tools that the program currently is working with. Certainly though, we want projects beyond that. This is just a catalog inventory of the current projects we're working on, but it certainly is a start for people to look at that.

And - Teresa.

Teresa Fryberger: Thank you, John.

I would just add to that that -- I mentioned in my remarks that this was a big challenge for the program managers here at the headquarters to develop partnerships, and it's probably even the bigger challenge for those of you out in the research community.

So I would encourage you to look at these materials and contact us if you would like suggestions or something. It has to be done. We can't comment on your proposal or tell you how to write your proposal, but we could certainly try to assist in identifying partners. And we will - this information, if you do contact us, will be made public.

John Haynes: Thank you, Teresa.

And also I would point out that on the AIWG Web site, each program element has their program plans for FY06 through 10 hosted online. So you could certainly get a very in-depth with each specific program element, be it aviation, disaster management, what-have-you of the projects during that timeframe and who the partners they're working with and points of contacts are.

We have one question here which actually I'm going to refer to either Martin or Lawrence just so I don't stumble it.

Can end-user proposal member organizations receive funding under this solicitation?

Lawrence Friedl: John, this is Lawrence.

Absolutely, yes. That's sort of the intent. However, if they are international organizations,

NASA cannot directly fund organizations that are non-US entities. If they're US entities, absolutely, any and all US entities can receive funding.

John Haynes: Thank you, Lawrence.

That said, I think financial contributions and other type of contributions from partners are also appreciated, and in some cases, a sign of their commitment to the effort of being proposed. So, it's something to think about as well.

Martin Frederick: Yeah, John, let me add -- this is Martin -- let me add the - I think the philosophy is that NASA wants to meet its goals of extending the benefits of the NASA research to decision support not to be the funding agent for an operational agency decision support development effort.

So knowing that an end-user would be tying into say NOAA or EPA or another operational entity's activities, we would want to make sure that the operationalizing with supporting financially and with effort in the development - continued development and assimilation of NASA research results into their distinct position -- support system or one that is under development that they're committed to deploy.

Lawrence Friedl: And this is Lawrence, just to add on to the previous comments, echoing Marty.

For international activities, we're certainly interested in international activities as long as those international partners come with their own funding to support their part of the project. But NASA could support the US entities that are part of an international effort.

And we can certainly take in kind funding from organizations within the US such as State Department or USAID who can directly fund international entities.

Man: It would be helpful to summarize the rules for this and the answer that goes online so that it's clear.

I would add that if the partners, the federal agency, and the - that federal agency is going to be accepting funds from NASA, that that's okay, as long as the funds are not used to support civil servants at that other agency. And federal agencies ought to be aware of that in the participating proposal. That is a restriction.

John Haynes: Thank you all.

We have a question for Steve Ambrose here. "Disaster management does not mention earthquakes. Does that mean that the program is not interested in earthquake related proposals?"

Stephen Ambrose: No. That doesn't exclude the earthquake proposals. And even when we're speaking about the AWIPS next generation, I'm looking at that as an old hazards type of decision support system. So there could be some ways that you can enhance that through AWIPS.

There's always ways to sustainable development in developing countries that earthquake techniques and applications can be applied. And of course there's always the opportunity for a very unique earthquake related proposals stand on its own with the decision support system that may be coming our way or working through the USGS. There are lots of opportunities there.

John Haynes: And we have another disaster management one here, so I got you. “Does the request for AWIPS proposals indicate that it's a priority over other decision support systems?”

Stephen Ambrose: Well, it is a priority system that we’re looking at and we want to focus on this year. The National Weather Service is going through a major next generation upgrade or now they're calling it the AWIPS Evolution or (AWIPS 2). We want to be able to participate in that as fully as we can, so that is a priority decision support system where I would hope that we get some really good proposals and have some preference over that decision support system if we do get good proposals related to it. I know it's a new area but it's one that I want to focus on.

John Haynes: We've gotten one question about our procurement guidelines asking “Does the PI carry the sub-awards or contracts or are all funds disseminated from headquarters when the proposals are funded?”

That really depends on the case and on the type of award.

Martin, do you want to speak to that?

Martin Frederick: I'm sorry, John, I couldn’t follow the question.

John Haynes: The question was on our procurement guideline, the questioner asks “Does the PI carry the sub-awards and contracts or are all funds disseminated to the partners via headquarters?” And I said it really depends on case, but I wanted you to answer it…

Martin Frederick: Yes, I can answer that.

The way that we have done it in the past is for all non-NASA sub-awards to go…

((Crosstalk))

John Haynes: Non-US government.

Martin Frederick: Well, let me be clear. All non-NASA awards go out through the NASA field centers, and where it is a sub-lot to another government agency, then it goes from the field center out to them. If it goes - so in other words, all procurement activity will go to a field center with the exception of activities that are - where there are awards or sub-awards that go to other NASA field centers.

If, as an example, a NASA space center is the procurement place for the solicitation and the Goddard Space Flight Center wins an award, we will directly fund Goddard Space Flight Center from headquarters. If an award is supposed to go to USDA because it's sub-award, then that will go not from headquarters but will go from the field center.

So for the most part, the non-government awards will go through the sub, go through the proposer to the PI. The government sub-awards that are not NASA will go to the field center and then the NASA sub-awards will go through headquarters.

Is that clear…

Woody Turner: Another way of - Martin, this is Woody - another way of thinking about

that is the PI is responsible for handling - we'll get the funds for all non-government NASA and other government agency organizations and it's responsible for distributing them, so either in academics or non-profit private sector, et cetera would go to the PI.

Martin Frederick: Right. After going to the field center, you're saying.

Woody Turner: Right.

John Haynes: All right. Thank you all.

We have one question that's going to go Ed on carbon.

It states, "DSS proposals are requested thru a separate call as well as through the carbon science call. Can DSS proposals pertaining to carbon science be sent to the regular DSS solicitation or should they be directed only thru the carbon science program?"

Ed Sheffner: If the proposal is to carbon science primarily and also link to carbon management, I would recommend that it go to the carbon science solicitation.

If the proposal meets all the requirements for carbon management under this solicitation, under the decision solicitation, then it should come here. It's somewhat of a judgment call, but I would recommend reading the two solicitations carefully and basing the decisions on what's included in the solicitation.

John Haynes: Thank you, Ed.

We have a question about decision support tools. I imagine there are many new products to be integrated into existing decision support system. Is NASA or the host organization responsible for this integration and does is the intent for the tools to become operational?

It is certainly the intent to transition to operations. As far as will NASA or the end host organization be responsible for this integration, Martin or Lawrence, do you want to respond?

Lawrence Friedl: The intent of the three-year project is to work out the details to see what it would take to do that integration type of activity as well as to evaluate the value of the Earth science data in that decision support system or decision-making process.

So in that three years, both determining the value as well as determining what it would take to do the integration and then to do or to start the transition activities if the partner - if the data is a value to start the transition activities into that other agency, the idea, at the end of the three years, it should not be continuing to ask NASA for continuing funds to do that transition.

So to some degree we're trying to show the value, trying to do some of the integration activities. But at the end of the project there may be some integration activities that are still left to be done.

Martin, do you want to add anything?

Martin Frederick: Yeah. I'll just put it in terms of understanding that we're going to have a lot more good proposals and we're going to have money to fund them. So the

stronger proposals are going to be ones that have a well-thought out, well-researched approach to getting the NASA or science research results extended into decision support.

And I think that the better that is thought out, the more likely it is that the peer review panel to find those strong folks, we're looking for a natural value that can be very high and more like - the more able the PI then to make a case that this is going to be successful, the more likely it is I think to be graded a priori.

Man: Martin, if I can - thank you for stating that - and if I can add, that we in the panel review fully recognize that things will come up over the three years of doing a project where the team will learn what exactly needs to get done to do some of the integration activities.

So we recognize that not everything can be understood a priori and that things will occur during the project, that will affect both the transition and the integration, but that's partially what we're trying to fund.

But as Martin said, those teams that better understand the user community, better understand the partners, better understand the Earth science data and the potentials to determine value and the structured approach to do the integration will probably fare better in peer review.

Man: Well said.

John Haynes: Another question:

Exactly where are the examples of current DSS systems on the Web? Can you show these

on the screen?

I don't think I can show them on the screen. But again, on the AIWG Web site listed on the second slide or third slide of the presentation, has a link to several booklets, booklets including detailing all of our satellite missions, all of the decision support we currently - or have worked with in the past, and as well as the - a booklet on the Earth system model that the program is currently involved with. So you could see lots of examples to that page.

AIWG Website: http://aiwg.gsfc.nasa.gov/

One person asked about missing the NOI deadline. They ask if submitting an NOI after the deadline is encouraged.

If you've already completed it, yes, it's certainly helpful to the program managers here to get an idea or flavor of what proposals are coming in and so they can get a better handle on the communities, maturity in that area, and what decision support tools are out there.

So it is certainly helpful information for the program manager. But as we said in the solicitation, it is not required to be submitted. It has no effect on final disposition of proposals. The only strong hard deadline is May 25 for final proposals to be submitted.

Will ranking preference be given to operational decision support systems over those currently in development?

The answer is no.

Do we expect feedback on the NOIs?

No. There will be no feedback on the NOIs themselves.

Is there a problem with enhancing a proprietary decision support system as long as enhancements due to NASA products can be documented and can be shown on a national scale?

There is no problem - I'm wondering what proprietary decision support system means.

((Crosstalk))

John Haynes: Yeah.

Lawrence Friedl: John, some of that is the nature of cooperative agreements where - which is the funding mechanism that at least NASA Earth science prefers. And so it may deal with a private sector company wanting to enhance disposition support system and then not allow the enhancements to be broadcast publicly because it was funded by NASA support dollars. And that needs to get worked out in the corporate agreement activity.

And I would refer that - the person who asked that question to really read the cooperative agreement guideline in terms of what they want to be putting in the proposal because there are some very, very specific things when a private company wants to join a cooperative agreement with NASA in terms of what they have to do if they want to keep the work that's done on public fund. If they want to keep it proprietary, there are some specific things that they need to be doing

over the course of a cooperative agreement.

So, and the answer, we might want to refer people to that specific section of the cooperative agreement handbook.

Martin Frederick: I think Lawrence has pointed out that the devil is probably in the details here, but let me speak philosophically for a second.

We would be delighted I think as a program to show a connection with the commercial sector in finding a way to extend NASA research results into third-party decision support systems that could be good - show good socioeconomic value to the nation.

But I think that Lawrence stated very well that the proprietary nature of products that are - tended to win in a marketplace makes it a challenge and it's incumbent upon the submitter - the PI to really investigate where the boundaries are, make sure that there is the plan in place that's mutually beneficial to both sides.

Teresa Fryberger: Yeah. This is Teresa. Thank you Martin and Lawrence.

I think that the issues associated with proprietary work, there are clearly legal issues. And I'd like to propose that we find the language that Lawrence is referring to and answer this question very clearly on the Web. It's a fairly complex question.

Man: That sounds good. I'm okay with that.

After telecom answer to the above question:

Regulations pertaining to rights in data under funding instruments issued by NASA include the following:

∞ ***Contracts*: Refer to the basic Rights in Data clause at (Federal Acquisition Regulation)**

FAR 52.227-14 and associated coverage in FAR 27.402 through 27.404 with a focus on Limited Rights Data.

∞ ***Grants and Cooperative Agreements with Commercial Organizations with cost sharing*: Refer to the Rights in Data provision in the NASA Grant and Cooperative Agreement Regulation at 14 CFR 1274.905 and associated material in 14 CFR 1274.208(l).**

∞ ***Grants and Cooperative Agreements with Educational Institutions and Nonprofit Organizations and Commercial Organizations without cost sharing*: Refer to the provision in 14 CFR 1260.30. Note the introductory guidance concerning proprietary information.**

John Haynes: All right.

We have a question. "Is there a preference for proposals on decision support tools that are called out on our Web site?"

No. In fact we - there would almost a preference to not to expand the field of decision support systems we're looking to at hand. The ones posted on the Web site are great examples of our current and past projects, but we are looking to enhance new decision support systems from those in the past. But certainly no preference is given to those listed. We're - we are here to expand the horizon.

Are contributions in kind from partners a criterion in the evaluation process?

We mentioned in the earlier slides in the table that was given, contributions for partner organizations are strongly encouraged. However, partner funding does not count towards funding level guidelines. That's in the solicitation.

Is there a summary of the NASA research results that may be appropriate in one place?

Again, I point you to the AIWG Web site and the Applied Sciences program Web site which has lots of information, cataloguing and detailing models, satellite observation systems, decision support tools that the program has worked with

and developed over the past five years.

Man: John, if I can…

John Haynes: Sure.

Lawrence Friedl: To the previous comments related to cost sharing. We do have some specific language in the solicitation in Section 4.5 that refers to it. It agrees with what you said, but there is some specific language that we can refer, you know, refer them to.

John Haynes: All right. Thanks, Lawrence.

Should we consider missions that were highly recommended by the NRC Decadal Survey for launch as soon as possible? For example, they listed the (DESDynI) mission.

Man: Destiny.

John Haynes: Oh is that Destiny? Okay.

So that question -- I'm going to open the floor to that question.

Stephen Ambrose: Steve here.

I think that's a difficult one to do because we haven't made any determination of how we're going to respond to the Decadal Survey and where the missions are going to go. We really got to go with the slate of what's planned that I believe within the

three-year period of the solicitation -- we can't stretch out too far because the results have to relate to an instrument that's going to be available by the end of the period.

Man: And most of those at least are not public, but most of those missions even the ones NASA is considering, have no missions or anything yet. So it will be really difficult.

Teresa Fryberger: Yes, I agree with that; that was well put.

Well, we need to be thinking about these future missions. I think that we want to get a little closer in the planning stage before we start trying to bring them for societal benefit beyond their intent.

John Haynes: Okay. This is one. "Regarding drought related DSTs, there's an emphasis on drought prediction as opposed to monitoring. Does that limit the appropriate DSTs to forecast models?

((Crosstalk))

Lawrence Friedl: This is Lawrence.

We had water - we had drought in - maybe in your area as well as in water management, so.

Man: Looks like Ed has got an answer for this.

Ed Sheffner: Yeah. It's - it ultimately would be considered potentially under agriculture - or also, to that matter, under carbon or invasive species.

But the - no, the response to existing conditions is legitimate, a potentially legitimate proposal does not have to be -- (dealing) with droughts, does not have to be confined to drought prediction.

Lawrence Friedl: Ed, this may be somewhere where we're caught between the different national application areas. I would - it sounds like if it's in the relation to ag or carbon, that you're willing to accept drought monitoring.

In the water section, the water management program has a number of projects that are already looking drought monitoring. And so in our section solicitation, we specifically asked for proposals that are looking at drought forecasts and short-term predictions.

So I would say if the proposer is going to be looking at the drought aspects in the water management context, that we would prefer projects that are looking at short-term forecasts and predictions. But if the person is going to be looking more at carbon management activities, it sounds like you're interested in those projects.

Ed Sheffner: That is there. Maybe confusing to the community, but it is there.

Lawrence Friedl: All right.

John Haynes: Lawrence, this would be yours. What is NASA's feeling regarding additional HAB -- Harmful Algal Bloom projects.

Lawrence Friedl: From - as the program manager, I'm very interested in additional harmful algal bloom proposals. I would say that we have had a significant effort looking

at harmful algal blooms in the northern Gulf of Mexico area and we still have a project underway doing some of those activities.

Given that and given that we're trying to expand the portfolio both in terms of other issues in the gulf and in terms of other regions, I would encourage harmful algal bloom projects in other regions than the gulf. But I'm certainly willing to accept another harmful algal bloom project in the gulf.

But all else being - if two projects come in and one has it in another region and one has in the gulf, I would probably prefer the one in another region simply because we have already existing HAB projects in the Gulf of Mexico that are going to be continuing for the next couple of years.

John Haynes: Thanks, Lawrence.

We have a question here of -- when you suggested that we at NASA have listings of potential partners on our Web site and could suggest potential partners – or agencies that may be amenable to the area of interest by a proposer -- would you also suggest the scientists who may be willing to be collaborators?

We would not do that.

Teresa Fryberger: And I would like to add to that, when I said that, I meant that we would help you identify particular agencies or parts of agencies or organizations to work with. I don't think we're going to give anybody any names and phone numbers here.

John Haynes: Thanks, Teresa.

Teresa Fryberger: So to that extent we can help you - on the - going back to this question, on a research side, we can help you identify just as we can on the partner side groups or entities that are doing research in that area. We just cannot give individual names. So in a way, the answer is no.

John Haynes: We have one question here. "Are proposals using data for the (MODIS) instrument only discouraged?"

And in the Section 2.2, we stated very clearly that we strongly encourage projects to use an array of our science research results, especially ones from recently launched NASA missions like IceSAT, Aura, GRACE, CloudSat, CALIPSO, as well as simulated products from upcoming missions.

In some individual program element areas, there is - that individual area, some of them I know discouraged - or downplayed (MODIS) usage.

Lawrence, I believe water management is one.

Lawrence Friedl: Well, first of all, it's because our portfolio has a lot of projects that are looking at the use of (Landsat) and (MODIS). And so what we're specifically trying to do is encourage people to be using observations from satellites in addition to those areas.

So, given our - given the portfolio -- and we are trying to expand beyond (Landsat) and (MODIS) -- we recognize the incredible value that those two systems have provided.

However, in many ways for water management we've demonstrated the real potential of them. If a project comes in that uses (MODIS) and (Landsat) in addition to a lot of the systems that you've provided, we would be ecstatic to read that.

If a project comes in that's limited to (Landsat) and (MODIS), I do not think it will fare well. We're trying to encourage people to springboard from those two and incorporate other systems in addition to those.

John Haynes: Thanks, Lawrence.

I have a question on aviation. "That numerical weather prediction refers only to the finite difference (full physics) type models or is it generalized to include automated forecast systems that are not (full physics) models?"

If the question is referring to forecasting systems such as AWIPS, that's not what the solicitation language is referring to. It is referring to the numerical weather prediction models both on a global all the way down to a regional scale that are inherent - that even though they are models are inherently used for decision support and forecasting.

Examples on a regional scale, short-term scales, would be the RUC model, all the way up to the (WRF) model, the weather research and forecasting model at NOAA, as well as the global forecasting system of NOAA. So those are some examples there.

Can a NASA center submit proposals?

Certainly centers can submit proposals. The solicitation is open.

And can proposals cover NASA civil service salaries?

Yes, they can. It's - other federal agency civil service salaries that can't be covered, I believe.

We have a question here which, Lawrence, I'll probably have you respond to.

What is meant by quantifiable baseline measures mentioned on Page A20-8 of the solicitation? What is meant by quantifiable baseline measures mentioned as a must thing to be included in the proposal? This questionnaire is not clear about NASA expectations of quantifying proposal quality.

Lawrence Friedl: Yeah. This goes to the information related to performance measures. And also we're trying to get people to articulate in their proposals what the decision support system is.

And if we're imagining this project, at the beginning, a partner agency or user organization has an existing decision support system or existing decision support process. It seems like they should have some sense of what the performance of that system is before the project gets started and that at the end of the three years when you've incorporated the Earth science data and you can run that same process again, you'll be able to see some marginal change from early state to the end state. And that marginal benefit could be attributed to the Earth science observations.

And so what we're trying to say is we would like the people to be establishing what that - what we're calling baseline which is at the beginning of the project, what is the

performance of that decision support system or what is the quantifiable value of that decision-making prior to the project starting so that by the end of the project the proposal team will be able to make some assessment as to the change over the course of the life of the project.

And we're saying quantifiable because in previous solicitations we have received very qualitative sort of answers and responses from their view panels says that they would like to see more quantitative information. And we're also getting that from some of the people that are talking to us about our program, is trying to get more quantitative in the value of the Earth science data.

So we're reflecting that in the proposal call to say that we want to get the - some quantifiable assessments of the initial state of the decision support process.

John Haynes: Thanks, Lawrence.

We have a question about -- if the NASA data is being effectively used, will the NASA data from satellites become operational? If not, what happens to the data after three years – with the project being over?

As we said, we're evaluating the potential of NASA Earth science research results to enhance decision support. NASA data streams are not, if you want to talk about in a federal agency sense, operational, like NOAA satellites, they are research satellites. Many of our satellites, however, do have operational follow-ons coming online in the next few years such as the NPP and NPOESS constellations.

I'll throw this question open to anybody to respond, me as well probably.

Stephen Ambrose: We would hope that your project is so compelling and affordable and creates great results that the agencies will want to buy in to continuing the data operation. How about that?

It is a problem. That transition from research operations is a big issue that's related to this. And we're hoping that there's a demonstration of these projects that we can be convincing that future systems incorporate these capabilities, NPP and NPOESS, for example, and that they do become operational.

Ed Sheffner: A couple of things.

One is that it's perfectly - it may happen if the data from the experimental NASA system…

(Rich Heckman): I can't really hear, it's (Rich), can't really hear.

Ed Sheffner: Okay. Can you hear me now?

(Rich Heckman): That's better.

Ed Sheffner: Okay. This is Ed.

I was going to add that it's possible that the data stream will continue - the NASA data stream will continue after the three-year term of the project in which case the data products would continue to be there for the operational user.

But as Steve pointed out, there is an ongoing issue about how NASA will work with the community to transition the data sets that have demonstrated utility from

experimental status into operational status.

And the information that we get from these successful proposals will -hopefully will feed into that process.

John Haynes: Thank you, Ed.

I'm not sure about this one because I'm not familiar with this system. But anyone that is can jump in. Are layers available in NASA's WorldWind sufficient to count as using Earth observing data, for example, if we were building a DSS mapping application on top of WorldWind?

And B, what about enhancing the modeling on existing DSSs that already use NASA data, for example, for tracking uncertainty?

Okay. So, two separate questions. The first one is about the layers available by NASA WorldWind, do they count as using Earth observing data?

Woody Turner: Well, World - this is Woody. I mean WorldWind is a NASA funded visualization tool out of Ames which incorporates NASA data into the SERVIR projects. One of our partners, IEDT, developed a WorldWind based visualization tool called Surveyor VIZ which has been very helpful to that project.

I think you could think of WorldWind as a NASA product that's unique for use as NASA observation.

Well, if anybody else wants to…

Martin Frederick: Well, I - this is Martin. I would kind of turn the question around a little bit.

They - that while that would probably qualify to meet the minimum requirements of having NASA science research results as part of the project, I think it's important to point out to people on line that this is going to be a highly competitive process. And if you're having to reach to make a case for how this - that official to NASA by extending the kind of research results that are called out in the solicitation and showing what kind of benefit it will be for societal benefits, then you're probably going to be run up against a bunch of other well put together and high impact projects. So, it might not do so (unintelligible).

I'm not trying to be negative in any case, but be very encouraging of trying to really understand what NASA is trying to accomplish here, and that is to extend to the great extent possible the research result, dollars that the US taxpayers have paid to study the Earth from space and how we can extend that for societal benefit to the greatest impact that we can.

So, turning the question around, instead of saying, "Well, does this qualify?" say, "Well, you know, lots of things will qualify that will not get funded because there are going to be lots of really good proposals that use a lot of Earth science research results that have a very big impact in operations and have very good partnerships, very good networks, how organizations are coming together," et cetera.

Thanks for letting me go on.

John Haynes: Fair enough.

(Duane): This is (**DeWayne Cecil, Chief Scientist of NASA Applied Sciences**), I'd like to take a shot of the second part of that question.

If I'm reading it correctly, it sounds like someone would be proposing to enhance the decision support system itself that's already using existing NASA data. An example there is tracking uncertainty. And I would think that's not something the applications program would be interested in. That sounds like it's improving the decision support system itself and not showing enhancement with a NASA product.

John Haynes: The exact question was, enhancing the modeling on an existing decision support tool that already uses NASA data, if that's acceptable or not?

Martin or Lawrence, did you have anything kick in on that?

Martin Frederick: Wow.

Modeling efforts - NASA modeling efforts are funded out of a different program in the Earth science division.

The - you know, it used to be a bit of a fuzzy line as to what constitutes adopting a model that's been put together for persistent science research within NASA, adopting it to be able to be used for operation utilization, versus developing the algorithms that would have been funded - would have been funded under a modeling line item.

It's probably - that's probably worth talking to the program manager for that particular

program if it was, for example, the disaster management issue to give Steve Ambrose a call and spend a couple of minutes talking to him about the details of it.

But, you know, in general, we don't fund the development of research models. We fund the utilization of models that were developed under the research program and adopting this for use in decision support.

John Haynes: Thanks, Martin.

We have a question, for (Landsat) gap filler data such as AWIFS, does JACIE validation qualify that data source for use?

Again I'd point out in 2.1, Section 2.1, of the solicitation. It says commercial remote sensing data that has been validated by the JACIE in support of NASA Earth science research grant should be considered NASA Earth science research result.

Are regional - okay, another question, are regional consortiums and state agencies considered as viable partnerships…

Man: Hey, John?

John Haynes: Yes.

Man: (Unintelligible) in just a second?

John Haynes: Sure.

Man: Let me see if - I'm going to test this and see if it's right.

Program managers, correct me if I'm wrong, but the JACIE does more than just validate commercial data for NASA Earth science research activities. So, some of the work that JACIE had done - does would not qualify as NASA Earth science research results.

John Haynes: Correct.

Man: It is - I think that being very careful about what the language of solicitation says will help guide the proposers. It's got to be data that was validated for use in NASA research activities…

John Haynes: Correct.

Man: …not just any (such as NGA) type of activity.

John Haynes: Correct.

Man: Thanks.

John Haynes: Yes.

If the specific product that the question was asking about, if it was validated by JACIE in support of NASA Earth science research grant, it would be considered - it will be considered with the solicitation NASA Earth science research results, but not otherwise.

Are regional consortiums and state agencies considered as viable partnerships absent other federal agency involvement?

Yes, they are.

They need to find…

Lawrence Friedl: John, this is Lawrence.

If it is one particular state agency, then I would say that that proposal should really consider how the transition would occur to a broader regional scope and/or that proposal should really make the case as to why that individual state in improving that state's decision support system is in such importance that it's of national importance.

And I think it's, you know, in some cases, it's very easy to make that argument, but they would need to make the argument as to why that one state. I think it's a whole lot easier if you're working with regional organization, I think it's, you know, that involves the number of states.

I think it's easy to make the argument as to why helping that region would support the national interest. But I would say (helping) one individual state, the transition plan needs to really articulate how it would be - those benefits will be extended to other states and/or how that one individual state is of national importance to the rest of the nation.

John Haynes: Yes, I agree, Lawrence.

And I would refer people again to the solicitation language itself on the wording about national impact and national scope. As we said, we'd support proposals of national impact including regional and international activities if they had US national importance.

An example of such international organization and also those national and regional association consortiums that the question was asking about. For example, the Western Governor's Association comes to mind.

Lawrence Friedl: And, John, just to add to that, within the program, we fully recognize that even working with the national organization or a regional organization that a project has to get done in some local area. So we recognize that to actually conduct the project itself, needs to be done, you know, potentially on a smaller scale.

The reason why we're requiring sort of the national interest or the regional organization to be part of it is - so that once it's done at one smaller scale, it can be taken and extended to a broader area so that the nation can benefit more broadly than just one particular locale.

John Haynes: Thank you, Lawrence.

Question that says, can you define the term end-user? That is if we partner with the federal agency, who supports the state agency? Who supports -- where does that end?

Well, you know, I think you could go on and on with that. We are supporting specific decision support systems for better management and policy decisions. The end-

user is the owner of that operational decision support system that the NASA Earth science research results are enhancing.

Now what that operational agency goes on and does with that information comes from the DSS is really beyond the scope of the proposal. So they could be sitting at the state agency. They could be sitting with some stakeholder, and that's wonderful. But it's - as far as we're concerned, the end-user is the owner that decision support system that we're enhancing.

Man: John, as a clarification, I hope this isn't getting down the weeds, but I agree with your definition except that it's not - the end-user is not necessarily the owner of the decision support system in terms of proprietary ownership, the user of that decision support system.

The tool or whatever may actually be owned by a third party but it's being used by that - by the end-user.

John Haynes: Sure, yeah. And that's what we're talking about when we say commitment to the project from the end-user to work with NASA.

Will panels to be split by application area? How does one decide what's the specific target? For example, drought monitoring, has benefits in multiple areas. I think we saw that earlier.

Yes, panels are split by application areas. But you have the choice when you are submitting the proposal electronically through NSPIRES to pick up to three areas of national priority that your proposal targets from first priority to third.

Proposals that cross those multiple - that cross multiple national application areas can and will be reviewed by multiple panels to get a wide range of opinion.

And I will stop there.

Woody Turner: I would just add to that, John -- this is Woody -- that in defining which area you're - in which you're - in which area your proposal fits, you should be cognizant of what's being called out for those particular areas, and not just because something in your mind happens to relate to the broad topic, for example, an ecological forecasting does not necessarily mean it's what we're looking for in this call.

So, to be aware of what's being solicited under those different areas. And when you check a box, try to make sure that it does in fact cover something that is being asked for in this solicitation.

Lawrence Friedl: And this is Lawrence.

I'll just add that, you know, we as program managers, it's part of our job to, as we read this proposal, that they come in to determine whether it needs to get read by more than one panel. And so we, you know, we often - we're often discussing the proposals as program managers and determining whether it needs - how many panels it should be read by.

John Haynes: Thanks, Lawrence.

Lawrence, this is going to get to you as well. What - well, it's actually going to Ed, but, yeah.

Water management and air quality specifically discourage proposals focusing on (MODIS) and (Landsat). Does this apply to actually - does this apply to agricultural efficiency? Can the use of AWIFS or (MODIS) and AWIFS, as well, for ag efficiency be proposed?

Ed Sheffner: Yes, it can be proposed. The - I think this is just repeating something that was said before in that we're interested in proposals that cover the broad range of NASA capabilities. This is not - we're not precluding proposals that deal with (MODIS) data. But those proposals will, you know, will have to address some compelling issues in relation to proposal from the address systems that have not been used as thoroughly as (MODIS) in previous proposals.

Lawrence Friedl: This is Lawrence. I'd like to clarify looking at language and solicitation.

For air quality, we simply said that we discourage it related to (MODIS) based aerosol or PM forecasting, partially because we already have six projects looking at that specific activity. So we haven't excluded (MODIS) overall for air quality proposals, we've merely done it for PM type of forecasting.

And then for the water management activity, specifically reading from the solicitation, it says that project proposing to use (MODIS) and (Landsat) must use other sensors and model products in addition to (MODIS) and (Landsat). So again, we haven't excluded it. We've just said, please use other sensors in addition to (MODIS) and (Landsat) for water related - water management project.

And I'd refer people back to the specific language in the solicitation. And whenever we say "in addition to," that should be read as, inclusive, not exclusive.

John Haynes: And, Lawrence, while I have you on the line, everybody wants to know, is (MODIS) also discouraged for coastal management?

Lawrence Friedl: Pulling it off right now to make sure I…

John Haynes: I don't see that.

Lawrence Friedl: I would refer people back to I think 2.1 where we say, what are the projects that we're particularly looking for people, you know, what are the - some of the observation systems and model products.

But you're right, we are much more open to (MODIS) in the coastal area.

But again, I would advise people to look at observation systems in addition to (MODIS) -- so (MODIS) and something else. So a project that's limited only to (MODIS) probably would not fare as well as the project that comes in with (MODIS) and another system involved.

John Haynes: We have a question, "Is a proposal responsive to solicitation, if the DSS (influence) is a very small region but is used very frequently by many individuals across the country – and these individuals will be partners in the proposed project?"

Well, a very small region. That's kind of subjective. If it's a region important to the nation, we have always welcomed those proposals, such as Gulf of Mexico proposals, Great Lakes proposals in water management or coastal, things of that nature.

If - so, it would depend, I would suppose, if the very small region with a very high

importance is not just to that local area but to the country for some type of management policy decisions or monitoring, if that - if you say data is very frequently accessed by the individuals across the country, it would seem to imply that that was the case. I want to let anybody else jump in with this.

Lawrence Friedl: This is Lawrence.

John, I think you said it well. At the second part of the question where it says a lot users are potentially going to use that improvement, then I would say it's incumbent upon the proposing team to really address the transition from that small scale area to all those other users. And I would say that becomes a big part of that particular proposal, is the transition to show that it's going to get used by these other potential users around the country.

John Haynes: And I believe the last question we will take from online that we have, how will benefits for the private sector be evaluated? I'm supposing they mean that this is a private sector DSS that's being enhanced. How would you evaluate the benefits? I guess either that or they mean, how you evaluate the socioeconomic benefits of any decision support tool? I'm not sure which they're asking here.

Through the benchmark process we have, I mean both quantitatively and qualitatively in the solicitation goes to this and refers to other language and documents. We're looking for both quantitative and qualitative results metrics of how the management/policy decisions from the specific DSS were enhanced from the baseline status - after they've been enhanced with NASA Earth science research results.

Certainly if we're talking about a private sector, this is, I mean just off the top of my head,

and this is really going to (Rich's) area, an energy management forecasting, let's say, it was some company - energy management forecast decision support tool where every degree difference in the forecast temperature costs them x million dollars of money because of the amount of energy they had to buy off the grid, if NASA Earth science research results showed an increased accuracy of their temperature forecast model of x degree Celsius that equates to x amount of money, that is certainly one way to benchmark how - what the benefit to the private sector is.

Just as an example off the top of my head, if that's what the question is asking. I would grant anybody else to jump in.

(Duane): This is (DeWayne).

I would put that question back to the proposer from the review panel. I think it's up to the proposing team to tell us how they're going to evaluate enhancement of the decision support tool and how they're going to do that evaluation.

That's really something that the proposer should include in the proposal. Tell us how you're going to evaluate the benefits or the enhancements to a decision support tool, whether it's private sector or public sector.

John Haynes: Thanks, (DeWayne).

Before we open it up to the floor in case anybody didn't have net conferencing ability, I'd ask our NSPIRES people if there's anything in particular that they need to know going forward about logging on NSPIRES and inputting their proposals, if there's anything to keep in mind?

Woman: If you hadn't - haven't submitted to NASA in the last year, we've moved to organizational submittal of proposals. And so there's a fair amount of registering of your organization that ultimately have to submit the proposal which will involve them logging in and hitting a Submit button.

But don't wait until the last minute to do this because it can be fairly time consuming. And that would be my only suggestion.

And we're available -- (Rashida Hogg) will be the task lead for this project. If you have any questions about NSPIRES, feel free to call the helpdesk.

And that's about it. Thank you.

John Haynes: Thank you so much.

Lawrence, Woody, Ed - I mean, Lawrence, Woody, (Rich), Martin, do you have anything to add before I open the lines completely?

Man: Nothing further for me, John.

John Haynes: All right.

Woody Turner: I have one quick clarification, John.

John Haynes: Sure, Woody.

Woody Turner: This is Woody.

In Section -- let's see -- 4.1, it says, a solicitation is, correct me, it's for new awards. NASA will not accept proposals for successor activities (unintelligible) projects, et cetera. And then, if you go to ecological forecasting under 5.1.6, I'm seeing there that I am looking for additional capabilities to SERVIR, especially enhancements to the biodiversity conservation application.

I just wanted to make sure that people weren't confused by that. I don't think those are conflicting statements. If one we're just to propose to renew any particular decision support, currently funded decision support activity for another three years just for its own sake, I think that would not be responsive to the call.

However, in this case, I've been trying to get more ecological data built into the SERVIR system. And so I am specifically looking for that as an addition to what's already there. It's something I think that would be relatively new for certain components of SERVIR. I just wanted to note that in case somebody was wondering what that meant.

Thanks.

John Haynes: All right. Thanks, Woody.

Okay. I'm going to ask the operator to open all the lines up that we have. Everybody is still on. So, they would be all - they would ask questions. I would ask you to mute your phone though so we don't get extraneous noise on the line.

So, we can open up all the lines now.

Coordinator: One moment.

Lawrence Friedl: John, I have one item whenever you have a chance. So it's no big deal, whenever it's ready.

John Haynes: Yeah.

I think you can go ahead, Lawrence, probably.

Lawrence Friedl: Okay.

I tracked some of the questions – I had one that apparently didn't go through. There was - I wanted to make the point that if a proposal uses a range of NASA Earth observation data, that they could also propose to use other organizations data or observation systems including like European satellite data, you know, or European or Japanese or some other country's satellite data, especially in the spirit of the Group on Earth Observations. But at a minimum, it would have to involve some of the NASA Earth observation data.

John Haynes: Thanks, Lawrence.

All right. We should have all the lines open now. So, since we have about 20 minutes left in the telecon, I would ask anybody who has not been able to submit a question or has one that's burning on their mind, to go ahead and ask it now.

Man: The question I had is -- following back up on the question of uniqueness and no continuations, how exactly is that defined since a PI is trying to work in, you know, more or less, the same, you know, areas of expertise year after year.

Does it mean anyone who's currently funded cannot be funded under the new (AO)?

Lawrence Friedl: I would say if you are funded under the - one of the current applied sciences program, whether it be the recent solicitations, the Decision 2004 solicitation, or the ROSES 2005 solicitation, that if you proposed to take a project that we fund under those solicitations and if you're proposing to merely extend that another couple of years with some more funding, that that would be non-responsive to the solicitation.

If you have existing funding through another solicitation that was not issued by the applied sciences program, then we encourage you to propose.

John Haynes: And, Lawrence, I think they are asking, if they have funding through a current applied sciences solicitation and they proposed a new project, even though their current one is still ongoing but they proposed a new project on a different tool, let's say, is that responsive?

Lawrence Friedl: Absolutely.

John Haynes: All right. Any other questions?

(Jeff): Yes. There was - this is (Jeff).

Probably a trivial, technical question relating to the bulletized components for the technical scientific management section -- is there any specific order to those or can we go ahead and use our artistic license to compose a coherent proposal as opposed to going bullet-by-bullet?

It's on Page A20-8.

Lawrence Friedl: In terms of the general format and the proposal for formatting contents, in the very early section of 4.4, we spell out the order. When it comes…

(Jeff): Right.

Lawrence Friedl: …to the particular subsection, you're free to use your artistic license.

(Jeff): Okay. That's what we thought but we wanted to make sure.

John Haynes: Thanks, Lawrence.

Any other questions?

Hearing no other questions, I'm going to declare a close.

((Crosstalk))

Ed Sheffner: There was one question that we skipped. The question that we - yeah, so we just said we'll answer that online.

John Haynes: Yeah. It was - yes, thank you, Ed. It was the question concerning facilities and equipment. We're going to hold that question and we'll find an answer. It's very long and we're going to have to go through this and get the information that's needed to respond.

So, the question on facilities and equipment, we'll - we will come back to and have that answered on the Web.

Yeah. Thank you.

Lawrence Friedl: And, John, we also owe an answer than is related to the cooperative agreement and proprietary - the proprietary decision support system.

John Haynes: Yeah. Yeah.

And we will also point out, not only we have the slides of the presentation presented on the Web on the Applied Sciences Web site which is at the science.hq.nasa.gov portal very soon. We will also have in the near future a transcription of this teleconference also posted on that same Web site.

And with that being said, thank you all for joining us. And remember, May 25 is the deadline for final submission proposals.

And I thank you all for joining with us this afternoon. Have a good rest of the week.

END